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Correspondence Instruction

By LOWRY W. HARDING

AMONG the serious consequences of the war are the disruption of the normal programs of educational institutions and the interruption of the educational plans and careers of millions of individuals. New and unprecedented demands made upon educational institutions, particularly by the armed forces and individuals in war industry, together with educators' sense of responsibility for meeting social and individual needs, are causing increased interest in finding and extending all useful forms of educational service.

Members of the armed forces and persons employed in industry need aid not only in meeting their present problems, but also in continuing and completing educational programs for postwar careers. Because of the character of much of the instruction needed, as well as the frequent movement of individuals and the lack of facilities in many localities, various forms of extension-type instruction are necessary. Because of these and other considerations, instruction by correspondence has become of great interest to educators.

The purpose of this article is to present information concerning the origin, development, and present status of correspondence instruction, with particular reference to colleges of education. Some attention is given current problems in this area, but the major function is to furnish background data needed for their consideration.

Correspondence instruction has a longer history than is generally recognized. Probably the earliest certain date at which a recognized institution of higher learning offered correspondence instruction is 1871; in that year the University of Cambridge began to offer instruction "beyond the college walls."

The earliest American date of which we can be certain is

1879, when William Rainey Harper, then professor of Semitic languages at Yale, started teaching students at a Chautauqua summer school by correspondence. Mr. Harper's place as pioneer in this movement was assured in 1890 when, at the time of accepting the presidency of the University of Chicago, he included University Extension (including correspondence work) in his plans for the reorganized university. There was a considerable amount of prejudice against this type of work, since it was new and revolutionary. President Harper's plans were accepted, however, and the University of Chicago became the first recognized American institution of higher learning to offer correspondence instruction on a high academic level. By 1933, the institution offered 418 courses in 31 departments.

Pennsylvania State College introduced noncredit correspondence courses in 1893, and its example was followed by several normal schools in 1903, 1904, and 1905. After a period of experimentation, Pennsylvania State College, in 1911, began correspondence courses carrying regular college credit.

One of the earliest adaptations of correspondence instruction to business and industrial use was made by John Humphrey, a Pennsylvania colliery superintendent, who, in 1906, provided a study room and employed a former teacher to supervise the correspondence study of his employees. Since that date, industrial organizations have made increasing use of correspondence instruction. The American School, in Chicago, from 1914 to 1918, operated on a plan similar to Mr. Humphrey's, providing meeting places and instructors to assist students with its correspondence courses.

In 1913, the Ohio State University was authorized by the General Assembly of Ohio to establish and maintain an extension division to carry on correspondence instruction and conduct extension services in all parts of the state and in connection with any department of the university.[1] It is noteworthy that this law preceded by one year the Smith-Lever Act, which provided for grants from the United States Treasury for extension work in agriculture and home economics. The Massachusetts legislature created a Division of University Extension in the State Department of Education in 1915, possibly under the influence of the Smith-Lever Act.

[1] *Ohio General Code*, Sec. 7955-1, 7955-2, 7955-3.

The Blackfriars Correspondence School, the world's oldest publicly supported correspondence school, was established in 1916 in New South Wales, Australia. Organized to meet the educational needs of inhabitants of sparsely settled territory, it has continued to the present to carry on a successful program.

IN 1923, a program of supervised correspondence instruction to provide vocationally useful training that could not be offered by the regular school staff was developed by Sidney C. Mitchell, superintendent of schools at Benton Harbor, Michigan. The plan proved successful, and adaptations of it have been made by several state departments, and by many individual schools, as well as by a number of colleges.

A group of school principals and officials of state departments of education in 1928 presented a similar plan of credit-carrying correspondence work to the Southern Association of Colleges and Secondary Schools. Portions of the plan were adopted and are now in satisfactory use. In the same year, correspondence study was suggested in the Sixth Yearbook of the Department of Superintendence as a means by which small high schools could extend their services.[2] In 1929, Teachers College, University of Nebraska, set up plans for supplementing high-school curriculums with correspondence courses. The values of correspondence instruction were recognized and listed in the National Survey of Secondary Education in 1932.[3] The following year, the United States Office of Education issued a bulletin on correspondence instruction.[4] In 1934 Teachers College, Columbia University, inaugurated a course in the techniques of correspondence instruction.

In Arizona, the State Department of Education, the State University, the two teachers' colleges, and the High School Principals' Association in 1936 reached agreement concerning state-wide use of correspondence courses and the evaluation and exchange of credits. In January of the same year, the Michigan Works Progress Administration project in correspondence in-

[2] National Education Association, Department of Superintendence. *The Development of the High School Curriculum.* Washington: National Education Association, 1928. p. 108.

[3] Kefauver, Grayson N.; Noll, Victor H.; and Drake, C. Ellwood. *The Horizontal Organization of Secondary Education.* Washington: Government Printing Office, 1934. pp. 240-50. (United States Office of Education Bulletin, 1932, No. 17)

[4] Gaumnitz, Walter H. *High School Instruction by Mail: a Potential Economy.* Washington: Government Printing Office, 1933. (United States Office of Education Bulletin, 1933, No. 13)

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struction was established for the specific purpose of providing first-year college courses for qualified high-school graduates unable to attend college. It was sponsored by the University of Michigan, whose College of Arts, Literature, and Science, and College of Engineering co-operated by assigning faculty members to supervise the preparation and assist in the writing of correspondence-course syllabi to parallel regular freshman courses. These colleges also agreed to accept a maximum of 30 hours of credit toward a degree for completion of such courses, validated by departmental examinations. Some indication of the wide acceptance of correspondence instruction is provided by the fact that, by 1939, the state departments of public instruction in 15 states recognized and provided for credit-carrying correspondence courses.

Growth in the number of institutions offering correspondence instruction has been rapid. In 1892, only one present member of the National University Extension Association, the University of Chicago, was providing correspondence courses, while 33 of the present members offered such work in 1927. Fifty-nine teachers' colleges by 1929 offered correspondence courses and, by 1933, all the states in the north-central area, except Illinois, Michigan, and Ohio, had developed strong correspondence departments in their state universities; Michigan entered the field in 1936. It is significant that these three states furnished the largest percentage of out-of-state students in the correspondence departments of institutions which furnish such service in that area. From 1923, the date of the inauguration of the Benton Harbor Plan, to 1930, more than 100 high schools started similar programs. Through the Armed Forces Institute, held at Madison, Wisconsin, in 1943, instruction by correspondence was offered by 81 institutions of higher learning.

Trends in enrollment constitute a good indication of the demand for correspondence courses. Only a few figures can be included here. The University of Chicago registration in correspondence study grew from 93 in 1892 to 7,626 in 1926. The enrollment has since declined, because of the increase in the number of institutions offering correspondence courses and a tendency of teacher-certification agencies to discriminate against such credits earned in out-of-state institutions. The total correspondence-course enrollment in member institutions of

the National University Extension Association in the decade 1920-30 grew from 33,198 to 76,789. Correspondence enrollment in the University of Michigan Extension Service increased from 26 to 4,485 in the three-year period from 1936 to 1939. North Dakota Agricultural College, the correspondence-study center for the state, enrolled over 6,000 students in its fourth year of correspondence offering. By 1936, more than five million persons had enrolled in correspondence courses. In 1943, the second year of war, the Extension Department of Arkansas State Teachers College enrolled 1,678 students in correspondence courses. At present, more than 75,000 men and women in the armed services are registered in courses offered by colleges through the Armed Forces Institute.

The present sources of correspondence-study service are of three types: colleges and universities, state departments of education, and private correspondence schools.[5] Of the first type, the University of Nebraska has led in the preparation of courses on the secondary-school level, while the University of Chicago has been prominent in developing college courses. Massachusetts pioneered in establishing an extension division in the State Education Department, followed by Montana, Nebraska, South Dakota, and other states. A few of these develop their own courses, chiefly on the secondary-school level, but the majority co-operate with colleges. There are fewer than a dozen recognized private correspondence schools actively engaged in supervised correspondence work of high-school or college type, although many offer vocational courses which are highly regarded by industrial organizations.

What types of institutions should accept responsibility for correspondence instruction is a major problem at the present time. Business and industry have long accepted correspondence instruction, offered largely by commercially operated schools, and use it as the chief method of advanced training for employees. Tax-supported correspondence centers are being established, for the most part, in connection with teacher-education institutions. From 10 to 20 per cent of correspondence students qualify for higher education but most of them are unable to attend college; they are worthy of help and are needed by society. If state colleges and universities accept the

[5] High schools which offer correspondence courses secure their materials from state departments or from colleges.

responsibility with which they were charged by Jefferson, for salvaging scholars from the "scrap heap of humanity," they should take a leading part in this form of instruction.

THE dangers and obstacles faced in developing correspondence instruction are serious, although not insuperable. Like all new movements, correspondence study has been viewed with suspicion. Its exploitation by unethical colleges and commercial organizations has contributed to this. The practices of the latter should improve since private schools are now subject to regulations of the Federal Trade Commission. College people dislike the commercialism connected with correspondence work and fear successful competition with campus courses. Instructors deplore the impersonal nature of their contacts with correspondence students, since much of the value of college has been attributed to the intangibles of campus life. They also find some difficulty in evaluating work of correspondence students. There is difficulty in appraising and equalizing teaching-load, due to wide variation in types of courses and materials. The construction of courses is a difficult task, involving vast amounts of reading, outlining, and writing. In many institutions, protocol and interdepartmental jealousies hinder the development of correspondence offerings.

The lack of uniform procedure and requirements among the various institutions and the lack of similar standards result in some ironically contradictory practices. A number of colleges are in the anomalous position of refusing to offer correspondence courses or offering only noncredit courses, and yet allowing credit for such courses taken from other institutions. As is to be expected, entrance boards and registrars find difficulty in evaluating the "paper credits" for correspondence work, especially since there exists no agency from which to obtain reliable data concerning the type and quality of correspondence work offered by the various institutions. Much of this difficulty is not unlike that pertaining to campus courses.

Controls and safeguards for three types of correspondence schools are being developed by the National Home Study Council (private schools), the Teachers College Extension Association, and the National University Extension Association. There is need, however, for closer articulation of the efforts of these agencies; wider membership by institutions offering

correspondence courses, and by those accepting credits; more definite, uniform regulations; and a central clearinghouse for the dissemination of adequate, unbiased information. There is need also for state school authorities and regional college associations to establish plans for evaluating courses and transferring credits. Correspondence study should be protected against abuse since it is more vulnerable than most forms of instruction.

CORRESPONDENCE instruction has definite advantages, however. It increases the field of service of colleges and universities and eliminates inequalities of educational opportunity. Aid is given to the 90 per cent who do not seek or obtain college credit, as well as the 10 per cent who otherwise could not secure a college education. Those most worthy of college opportunity may be discovered. The greater flexibility in course requirements and combinations makes it possible to arrange an individual curriculum for each student, whose progress can be adapted to his own ability and desire. Correspondence courses are good trial media for exploration of various fields. They furnish practical vocational information, and opportunity for self-evaluation and independent work. Students can explore their interests and test their abilities with little loss of time, money, or prestige. For public institutions, correspondence instruction furnishes a means of functional contact with large numbers of the public upon whom the institutions depend for support from tax funds. If these advantages are to be fully realized, textbooks, instructions, and requirements must be brief, direct, and lucid, and be accompanied by practical suggestions on how to study. Teaching materials must be organized in logical sequence, usually with practice before theory.

Possible consumers of correspondence instruction need work on all levels. Students unable to attend high school or enrolled in secondary schools of limited offerings usually need college-preparatory courses, such as advanced mathematics and science, and vocational courses. High-school graduates unable to attend college, and college students withdrawn for economic reasons and working at full-time jobs need a wide variety of courses. Adults of all ages and occupations are potential consumers, chiefly for noncredit cultural and vocational courses. At present, members of the armed forces constitute the largest single source of demand and have the greatest need. These

individuals are of three general types: those who because they left high school for military service and because they plan to secure further education wish to start on it while in service; college students desiring to continue or complete their educational program; and college graduates and other adults who, due to economic and industrial developments or changed interests, wish to start postgraduate, vocational, or other study.

THE costs of college instruction by correspondence tend to be higher for each student or credit-hour than campus work, and unless such instruction is conducted on a larger scale than has been usual, it probably will increase the total cost of education.[6] The University of Chicago finances its correspondence program entirely from tuition fees. Its registration fees vary from $25.00 for one major and $12.50 for one minor, to $2.50 for correspondence examinations on incomplete residence work and $1.00 for one week's lessons in incomplete residence work. Instructors are paid 40 cents per lesson. The average service-load cost of preparing outlines for one correspondence course is $287.79, and the average cost of marking one correspondence lesson is $1.14 (instructor's fee plus a percentage of his regular salary corresponding to the time spent). The University of Nebraska registration fee for one one-semester correspondence course, originally $12.00, is now $6.00, requiring greater subsidization from the regular university budget. Costs should eventually be lowered, as marginal courses and institutions are eliminated and as individual courses are used by more students. Costs of secondary-school courses may be indicated by the experience of Benton Harbor High School, where correspondence courses cost an average of $7.01 per pupil per year in comparison with $23.95 for agriculture, $17.31 for home economics, $14.60 for physical science, and $10.95 for commercial subjects taught in the classroom.

Financial profits on correspondence instruction are made only through student dropouts, which leave an unused balance of registration fees. Encouraging withdrawals may be legitimate practice for commercial schools, but such practices by public higher-educational institutions cannot be defended. Increased

[6] Fred G. Stevenson, University of Michigan, has stated that correspondence instruction is cheaper for the student and the institution than campus work, and quite as effective.

service to greater numbers of people should result in greater financial support from public funds and benevolences.

THE educational results of correspondence instruction are highly favorable. Follow-up studies in Montana have shown that students completing part or all of their high-school work by correspondence do good work in and out of school. Students in the University of Michigan Correspondence Study Project made better than average records in later college work. Extensive sampling has indicated that University of Chicago correspondence students in later residence work obtain marks averaging 0.41 of a letter-level higher than the average marks of all resident students. Instructors teaching campus and correspondence courses award marks averaging 0.93 of a letter-level higher to their correspondence students. Ninety per cent of the staff members at the University of Chicago who give both types of instruction believe that the work of correspondence students equals in quality that of resident students.

The findings of Bittner and Mallory indicate that correspondence students generally are good college risks. Although correspondence-course instruction is highly selective, a large majority of students state that their correspondence work has been as valuable as, or more valuable than, residence work. In many cases dropouts are not educational losses, as correspondence students tend to be more concerned with gaining knowledge than with securing course credit. Hence they often drop out when the purpose for which they enrolled has been achieved.[7]

EFFECTIVE organization for correspondence instruction is essential if colleges are to succeed with this type of offering. The following procedures, based on the experience of a number of institutions, appear to be most satisfactory. Correspondence courses should be administered by a separate department, with its own office staff. This department should have as its head a secretary or chairman, equal in rank to other departmental chairmen. His duties should include locating special opportunities and needs for service, arranging for courses to be offered, recommending appointment of staff members,

[7] Bittner, Walter S., and Mallory, Hervey F. *University Teaching by Mail.* New York: Macmillan Company, 1933. pp. 165-66.

publicizing services of the department, handling correspondence relative to services and registration, preserving data on courses and registrations, reporting registrations and results of students' work to the registrar, and administering the financial affairs of the department.

Any member of the college staff above the rank of instructor should have the right to propose courses for correspondence instruction. Such proposals should be passed on successively by the staff of the subject area within which the course belongs, the chairman of the correspondence-study department, the curriculum committee or similar agency of the college, the executive committee, and the dean or president. Withdrawals of courses should be handled similarly.

If the widest service is to be rendered, courses should be offered without credit and for high-school, undergraduate, and graduate credit. Offerings should include academic and vocational subjects for which there is need, this to be determined by survey rather than introspection. Courses and instructional materials should be developed by the staffs of the subject areas and departments within which the subject-matter is usually classified, subject to review by the college committee on curriculum.

The instructional staff of the correspondence-study department should be furnished by other departments of the college and other colleges of the university, as determined by the courses offered and the abilities and characteristics necessary for successful correspondence instruction. Selection of individual staff members should be made by departmental chairmen who propose specific individuals to meet the instructional needs indicated by the chairman of the correspondence-study department. Final selection should be based upon the agreement of the instructor and the chairmen of the two departments. Professional ranks of instructors should be similar to those of the college staff as a whole. Instructional loads should be carefully adjusted for those staff members constructing courses, developing instructional materials, or teaching in the correspondence department. Overworked instructors will sink to the level of disinterested, clerical hacks, thus damaging the program, for in the final analysis, the quality of the instruction determines the success of the work.

A Project in Teacher Education

By R. H. ECKELBERRY

THE Conservation Laboratory sponsored by the Ohio Department of Education, the Ohio Division of Conservation and Natural Resources, and the Ohio State University has been conducted for the past four summers. It has received a great deal of attention from soil conservationists, foresters, specialists in wild life, members of garden clubs, and other persons concerned with problems of conserving natural resources. It is a noteworthy project in teacher education as well as in conservation, and it deserves to be known widely among public-school people and others engaged in educational work.

Conservationists have always recognized that their problem is essentially educational—that the process of depletion of natural resources, which has been going on for many years, will not be reversed until the public has become informed and concerned about the problem. There has been a growing conviction that most schools have not been dealing with the problem as effectively as they should. This has been due to the fact that teachers and administrators either failed to realize the importance of conservation education, or did not know how to go about introducing it into the curriculum. There have been exceptions, of course. Certain schools in Ohio, notably those in Zanesville, developed effective programs in this field years ago.

The initial move toward dealing with the conservation-education problem on a state-wide scale was made by Don Waters, commissioner of the Division of Conservation and Natural Resources. He made available funds from the Division to establish in the State Department of Education the positions of Curriculum Supervisor of Conservation Education and Field Supervisor of Conservation Education. Ollie E. Fink, who had developed the conservation-education program in Zanesville, and Arthur R. Harper were appointed to these positions. They were expected to work with the teachers of the state in promoting more effective education in this field.

It was evident that systematic provision for the training of teachers in conservation education was needed. Hence, in October, 1939, a state-wide conference was called to discuss

the problem and develop a plan. Participants in the conference included state officials and private citizens representing different aspects of conservation, and educators from various institutions. After two days of deliberation, the conference recommended the establishment of a summer Conservation Laboratory to train teachers, and laid down certain principles under which it should operate. One of these was that the Laboratory should be located in the country, where problems of conservation could be studied at first hand rather than merely from books. A second was that the work should be of college grade and should carry college credit equal to that which a student could earn by attending college for a summer term.

According to the original plan, the Laboratory was to be sponsored jointly by the State Division of Conservation and Natural Resources and the State Department of Education, with the actual administration vested in the latter. But when it was sought to secure acceptance by colleges of credit earned in the Laboratory, it was found that this could not be done unless the work at the Laboratory was provided by an accredited institution as a part of its offerings. Accordingly, Ohio State University was asked, and agreed, to administer the educational program.

The Laboratory thus represents the collaboration of three agencies. The funds for its support, beyond those received from students' fees and charges for board and lodging, are provided by the Division of Conservation and Natural Resources. The director is provided by the State Department of Education, and the educational program is under the direction of the University.

Since the Laboratory is for the training of teachers, this direction is exercised through the University's Department of Education. Students entering the Laboratory for the first time register for Education 682—Field Laboratory in Conservation Education. This course runs for the five and one-half weeks of the first term of the summer quarter and carries from six to nine quarter-hours of advanced undergraduate or graduate credit. Students who attend the Laboratory for a subsequent season register for minor problems and carry on advanced studies of certain aspects of the general field.

The first session of the Laboratory was held in June and July, 1940, at the group camp in the Ross-Hocking State Forest (now the Tar Hollow State Forest), about 18 miles east of Chillicothe. The following year, the Laboratory was held in the abandoned Civilian Conservation Corps Camp in Zaleski State Forest, and in 1942 and 1943, again at Tar Hollow.

Those who have planned and carried on the work of the Laboratory recognize four fields of knowledge as constituting the principal subject-matter bases of a program of conservation education: geology and soils, plant ecology, animal ecology, and economic geography. Hence, specialists in these areas, together with persons conversant with problems of conservation teaching in elementary and secondary schools, have made up the teaching staff. In each session, the work of the staff members has been supplemented by the contributions of a large number of specialists in various fields who have served as resource persons. In 1942, for example, some 22 specialists, representing such fields as economic geography, entomology, wild life, soil conservation, and education, participated for periods ranging from one to ten days. Many of them were persons occupying responsible positions in conservation agencies such as the United States Forest Service, the United States Soil Conservation Service, and the Ohio Wild Life Research Station.

A total of 155 students have been enrolled in the Laboratory during its four sessions. The largest number at any one session was 48. This relatively small enrollment in proportion to the size of the teaching staff has meant a maximum of personal attention from staff members and resource people to the needs of individual students. The students for the most part have been experienced elementary- and secondary-school teachers from the public schools of Ohio, but a number have come from other states, including Connecticut, Illinois, Michigan, New York, Pennsylvania, and Tennessee.

It is impossible in a brief article to give an adequate account of the educational program of the Laboratory, but certain aspects demand brief description. One of these is plot work, to which students give a large part of their time. Plots of approximately 2 acres each are laid off in such a way that each

extends from relatively high to relatively low ground. The students are divided into pairs and a plot is assigned to each pair for intensive study. This study covers geological and soil conditions, topography, and animal and plant life; all of these aspects are studied as they are related to each other and to problems of conservation and conservation teaching. The students prepare maps of the plots showing relief, soil, vegetation, and animal life. These plot maps have sometimes been supplemented by large-scale maps of smaller areas within the plots, which are studied still more intensively.

Another noteworthy feature is the nature trail. This is approximately three miles long and laid out so as to illustrate a variety of conditions with respect to relief, geological strata, erosion, plant and animal life, and so on. Soil pits are dug along the trail, many plant species marked with identifying and descriptive signs, and other significant features and relationships pointed out and described by signs. Many of the field trips are made over this trail.

A museum housing specimens of rocks, soils, plants, and animals collected by staff members and students is an important aid in learning. "Table-top demonstrations" are sometimes carried on to show ways of constructing and using models and other equipment in the classroom in order to illustrate ecological relationships, processes of erosion, and so on. The library, consisting chiefly of books loaned by the Ohio State Library and of free material published by the Federal and state governments, is provided for the use of instructors and students. Various items of scientific apparatus and other equipment are loaned by the Forest Service, the Division of Conservation and Natural Resources, and other agencies. Other items are furnished by staff members or constructed by staff and students.

For purposes of field trips, lectures, and demonstrations in the different subject-matter areas, students are divided into groups in accordance with the school levels (primary, intermediate, or secondary) in which they are primarily interested. The schedule of each group is arranged so that it works with one of the principal subject-matter specialists twice a week and has two periods a week with the instructor in charge of the nature trail, museum, and table-top demonstrations.

The program has been flexible so as to permit a good deal of variation from day to day. On a typical day, the time of a

student would be divided about as follows:

7:15- 8:00 A.M.—Breakfast
8:30- 9:30 A.M.—Lecture by staff member or visiting specialist
9:40-11:45 A.M.—Field trip with staff member
12:00 M.-1:00 P.M.—Lunch
1:15- 3:15 P.M.—(2 days per week) Work on the nature trail, in the museum, or with table-top demonstrations
1:15- 4:00 P.M.—(3 days per week) Free time for plot work, study, or conference
4:00- 5:00 P.M.—Organized recreation—archery, swimming, etc.
6:00- 6:45 P.M.—Dinner
7:15- 8:15 P.M.—Organized recreation
8:30- 9:30 P.M.—Lecture or motion picture

Each student is required to write a term paper in which he shows how he expects to apply in his own school situation what he has learned in the Laboratory. This provides an effective means by which a student can integrate what he has learned from the specialists.

A special feature of the Laboratory during the last two sessions has been the Nutrition Conference, held on a Saturday afternoon and Sunday. Its purpose has been to show the relation between human nutrition on the one hand and soils and their conservation on the other. This consideration in relation to each other of two things which have usually been thought of separately has proved to be exceedingly fruitful. Many persons in attendance at the conference have been surprised to learn that, for example, to secure a proper supply of minerals and vitamins in the diet, it is not enough to eat whole-grained cereals and leafy vegetables; it is necessary also that these be grown on soil which has an adequate supply of various plant nutrients. Physicians, health workers, nutritionists, soil experts, foresters, wild-life specialists, teachers, and others have attended and participated in these conferences.

How effective has the Laboratory been? Several kinds of data are available for an answer to this question. The first is the opinion of conservation specialists who have had an opportunity to observe the program in operation. Many such persons—officials of the United States Soil Conservation Service and the United States Forest Service, editors of journals, specialists from universities and state conservation departments, and others—have visited the Laboratory. They have been emphatic in their judgments that it is making an exceedingly important contribution to conservation.

More important, perhaps, for our purposes is the opinion of students who have been enrolled. Since most of them have

been experienced teachers, their judgment deserves great weight. Almost without exception, they have been enthusiastic in their comments about the Laboratory and its influence on their teaching. They have stated that their experience has developed in them not only knowledge and skill but also an enthusiasm for conservation, all of which are necessary for effective teaching in this field. Many have said that the Laboratory provided one of the most valuable educational experiences they had ever had. Nor are these judgments made only during the period of residence at the Laboratory, when the students are under the spell of enthusiasm growing out of a new and stimulating experience. On the contrary, those who have been using in their own school situations for one, two, or three years, the things they learned in the Laboratory, retain their enthusiasm. A good many return for a second summer's work.

To THESE judgments of conservationists and students, the writer would add his own. He has never been connected with the Laboratory as either staff member or student. But he has had extensive opportunities for observing its work, having visited it during each of its sessions from one to five times, and for periods ranging from a few hours to a week. His opinion coincides with that of the conservationists and the students: the Laboratory is a very effective educational institution.

Several characteristics of the program are closely in line with modern trends in education. In the first place, the instruction is functional with respect to an important human concern. The staff members do not give courses in geology, geography, botany, or zoology as such, or try to train subject-matter specialists in these areas. Rather they use their command of subject-matter to educate teachers of conservation, which is a very different thing. The emphasis is on the relation of the different subjects to one another and to conservation, and on practical use in the elementary or secondary school.

Again, the program is noteworthy in that it represents an informal living, working, and learning together on the part of staff members, visiting resource people, and students. The Laboratory exemplifies the experience curriculum in the best sense of that term. The students do not merely learn from books or through set lessons; rather they utilize a wide variety of experience—reading, lectures, discussions, field trips, confer-

ences, demonstrations, and so on—in promoting their education.

Measured, then, by the importance of the matter with which it deals and its effectiveness in dealing with it, the Laboratory represents an important contribution to conservation education and to teacher education. This does not mean that the Laboratory is perfect. Undoubtedly, there is room for improvement with respect to many aspects of the program. But the evidence seems clear that the general plan under which the Laboratory has operated is good, and that the institution has abundantly justified its existence. It has done effective pioneer work in a field of the greatest importance.

THE 1944 session of the Laboratory will be held in the camp formerly occupied by the National Youth Administration on the shore of Leesville Lake in Carroll County. This session should prove better than any in the past, not only because it can profit from the experience of past sessions but because it will have a better location. The buildings and equipment, which were designed for an educational enterprise, are much better adapted to the purposes of the Laboratory than are those at Tar Hollow. Moreover, the new location is in the Muskingum Conservancy District, which has one of the most important conservation programs in the United States. Students, therefore, will have an unusual opportunity to observe modern conservation practices at first hand. The Conservation Laboratory, which has made such an outstanding contribution, seems destined for still greater things.[1]

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National Boys and Girls Week is scheduled for April 29 to May 6. The theme for this year's observance is "Youth Power for Days Ahead." Highlight of the week will be National Service Day, Thursday, May 4, when the youth of the nation will demonstrate their part in helping the war effort. Helpful suggestions for carrying out the program may be obtained free of charge from the National Boys and Girls Week Committee, 35 East Wacker Drive, Chicago 1, Illinois.

[1] Persons interested in attending the 1944 session of the Laboratory should communicate with the Director, O. E. Fink, State Department of Education, Columbus 15, Ohio.

Teacher Supply and Demand: Investigations Reported in 1943

By R. H. ELIASSEN AND EARL W. ANDERSON

THE shortage of teachers in 1943 was so evident that most of the investigators reporting on the supply of teachers and the demand for them did not attempt to analyze the demand. Attention was given mostly to means of providing teachers for the schools. The lack of teachers, however, undoubtedly was most pronounced in fields predominantly taught by men; these included industrial arts, mathematics, science, and physical education for men. There apparently was a lack of teachers on all levels of teaching from nursery school to college. The supply of teachers was most nearly adequate in a few college subjects.

Estimates vary as to the extent of the undersupply of teachers. It appears, however, that the total number of public-school teacher replacements needed in 1943 was between 150,000 and 200,000. About one-third of these was for teachers who moved from one teaching position to another, but the other two-thirds were replacements of persons who had quit teaching (60). In order to meet the unusual demand for new teachers, school administrators and state-department officials practiced great ingenuity. Retired teachers, married women who formerly taught, men rejected by the draft, and college students were called into service. Special certificates were granted to approximately 37,000 teachers of substandard training (14). Other methods of meeting the situation were sharing circuit teachers, doubling up or alternating classes, increasing teaching-load, and eliminating courses. Even so, a number of classrooms were not supplied with teachers. It has been estimated that over 600 industrial-arts departments were closed, and an additional 800 served by temporary and inadequate teachers (10). The estimate of unfilled positions on October 1, 1943, varied from 7,700 to 13,000 (24, 37). The difficulty in finding teachers was especially great in rural areas and small towns (7, 8, 51). A thousand rural schools in Illinois were closed (50). Many teachers in smaller towns and rural districts aspired to better jobs which were available almost for the asking. As a result the small systems suffered most heavily from teacher shortages.

In 1943, teacher turnover was at least 20 per cent as compared to a normal rate of 10 per cent (19, 57). Teacher-training institutions suffered great losses in student population, and were, therefore, unable to supply nearly as many teachers as formerly (13, 38, 42, 51).

The total demand for teachers was reduced in some areas, because of the effects of the pre-war reduction in birth rate. In Ohio, there was a loss of 121,305 pupils in the elementary schools between 1935 and 1940. This loss is now being noticed in the secondary schools as well (47). The increased wartime birth rate will result in at least a temporary increase in school enrollment (26).

THERE were few outstanding studies of teacher supply and demand during the year. Perhaps the most extensive study is that sponsored by the National Education Association, entitled "Adequate Supply of Teachers," which was made by the Committee on Supply, Preparation, and Certification of Teachers (1). Bowers contributed several worth-while studies in Ohio (9, 10), while Frazier supplied helpful statistics and recommendations from the United States Office of Education (23, 24, 25). Interesting data on what can be done about the teacher shortage are supplied from Virginia (2), Eau Claire State Teachers College (6), Northwest Missouri State Teachers College (18), Vermont (18), Pennsylvania (18, 30), Baltimore (27), Florida (33, 41), University of Minnesota (41), University of Houston, Texas (43, 50), Louisiana (59), and North Carolina (59).

Some of the detrimental conditions due to teacher shortage which exist in our school systems today are:

Emergency certificates, usually resulting in reduced quality of instruction (3, 10, 25, 51)
Closed schools, departments, or curriculums (10, 11, 22, 58)
Enforced ceiling attendance—against the democratic policy on which American schools were founded (11)
Expansion of circuit teaching (6, 11)
Approximately three hundred thousand children without teachers (25)
Classes enlarged beyond the point of efficiency (23)
Teachers overworked (3, 11, 49)
The number of men teachers seriously reduced (50, 53)
Increased restlessness among teachers and pupils (3, 11, 58)
Teachers assigned to areas for which they were not prepared (3, 50)
Extra-curricular and guidance activities reduced or discontinued (3)

The emphasis in the reports for 1943 centered around techniques used in meeting the increased shortage. The most important were:

More active recruitment of prospective teachers was carried on. This was noted by many reporters.

High salaries were paid to get teaching into favorable competition with other vocations. This was reported by many writers.

College students in their junior or senior years were asked to do their student teaching in regular full-time positions with pay (2, 6, 23, 42).

Certification procedures were made more flexible (3, 10, 26, 51).

Regulations concerning married women teachers were modified and liberalized. This practice was widely followed.

Refresher courses were made available to former teachers re-entering teaching (2, 6, 19, 55).

The curriculum was revised and improved (15, 19, 22, 50, 53).

Draft boards were urged to consider teaching as vital war work (3, 12, 13, 51).

Schools and state departments built up lists of possible appointees from among the names of former teachers, wives of men in service, and retired teachers (1).

There was utilization of professional men such as ministers, doctors, engineers, and lawyers to assist in school programs (18).

Use was made of student leaders in schools (23, 45).

Increased co-operation between states was developed in effort to find qualified teachers (1, 32, 49).

Efforts were made to increase the efficiency of school administration (49).

Concern was increased for improving the status of teaching (16, 40).

Considerable emphasis was placed on recommendations for the future. These include:

Prospective teachers should be urged to teach as a patriotic duty (1, 2, 30, 32).

State and national departments of education should co-operate in the recruitment and placement of teachers (18, 24, 58).

The Federal Government should pass the Federal Aid School Bill and thus make possible more adequate salaries for teachers and better support of the schools (17, 19, 25).

Some teachers should be frozen in their jobs for the duration to counteract the prevalent restlessness and the tendency to move from one position to another (3, 9).

The school program should be in two four-hour shifts, each shift for a separate group (22, 23).

Modifications should be made in personal restrictions on teachers (32, 49, 58).

The teacher-education program should be accelerated in order to speed up the preparation of teachers (26, 45, 58).

Teachers should be drafted and placed in uniform (12).

The school program should be accelerated by using Saturdays and summers (2).

Some of the authors make predictions about teacher supply and demand (59, 60). Bowers estimated that the shortage will continue to be acute for several years (9). Another investigator thinks it will be ten years (55). Frazier feels that the quality of teachers will continue to go down in the next few years (25). Brodinsky warns that the problem of educational collapse rests with parents and that they must do something about the problem if they wish to safeguard the future of their children (11). Similar warnings come in magazine editorials (51, 54).

The picture of teacher supply and demand, as painted by reporters in 1943, is dark. The outlook for 1944 is even worse. Public education, the "bulwark of democracy," is suffering severely from lack of qualified teachers. [Vol. XXIII, No. 2]

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EDITORIAL COMMENT

Child Labor and Educative Work

THE Child Labor Manifesto which was issued last January by 34 leaders, including the representatives of 27 national organizations interested in child welfare, is an important and timely document. It calls attention to the serious child-labor situation resulting from the war, and expresses the conviction that war needs can be met without exploiting children, that children can contribute to the life of their communities in many useful ways, and that their protection from harmful child labor is a community obligation of first importance. The signers of the Manifesto urge young persons and parents to resist the lure of war wages, and they call upon all the social forces of the community—the home, the school, the church, industry and commerce, labor, social and civic agencies —to unite in protecting children from harmful labor. Various lines of activity are recommended.

The authors of the Manifesto are careful to call for the protection of children from harmful labor rather than from labor as such. Some persons have talked as though any or almost any labor which children did outside the home was an evil which should be prohibited. This is understandable in view of the great evils of uncontrolled child labor in an industrialized economy and the bitter struggle which selfish interests have waged against any attempt to control it.

Natural as such an attitude may be, it is false and vicious, nevertheless. It needs to be re-emphasized that labor by children and young people not only is not an evil but is a positive good. There is no adequate substitute for work as a means of education. It is not easy to conceive anyone worse educated than the young man or woman who has never had any work responsibility. One of the greatest defects of modern urban life is that it does not provide adequate work experience for a great many boys and girls.

We wish that the authors of the Manifesto had been more positive in their recognition of the educational value of work. To be sure, they recommend the development of co-operative

[*Continued on page 56*]

READINGS

Books to Read

MELVIN, A. GORDON. *The New Culture: an Organic Philosophy of Education.* New York: Reynal and Hitchcock, 1937. 296 pp.

This book, in common with those of such writers as Cooke, Demiashkevich, and Meiklejohn, represents an effort to combat the arguments of the Pierce, James, Dewey, Bode school of educational philosophy and present an acceptable version of idealism. This author terms his central theory "dynamic pragmatism," explaining that it differs from the simple, static pragmatism of an earlier period (sic: 1860-1935) expounded by James and Dewey, and defining it by a quotation from Bagoslovsky, "—an evaluation of everything on the basis of its controlling active power." The author further explains that "Dynamic pragmatism . . . rejects incompatible dualisms, such as mind and body, as having their origin in epistemological or metaphysical error." The direction of the argument is indicated by the statement, "The school of America must realize with a new definiteness that it is dealing with spiritual things."

Through eleven thought-provoking chapters, under such headings as "The Absolute," "Relativity," "Man and the Universe," the author attempts to find and interpret that "controlling active power," eliminate dualisms, and "set forth the unified and living nature of all things."

The educational implications of the philosophical exposition are presented in three final chapters dealing with "The Elementary School," "The Secondary School," and "The College." There are also five short, disconnected but pertinently interesting appendices.

This is a stimulating discussion and, if logic and metaphysics are at times conflicting, that is as much due to the limitations of these fields of knowledge and man's means of acquiring knowledge, as to the author's treatment.

LOWRY W. HARDING

DE LIMA, AGNES; BAXTER, TOMPSIE; FRANCIS, THOMAS J., *et al. South of the Rio Grande: An Experiment in International Understanding Undertaken by Two Sixth Grades in the Lincoln School of Teachers College.* New York: Teachers College, Columbia University, 1942. 74 pp.

Teachers who wish to further their own understanding, and develop in their children an appreciation and understanding of, our sister republics will find this little book of 74 pages stimulating and helpful. It describes in vivid detail how two groups of eleven-year-olds explored "the rich field of study to the south of us" and the surprisingly large number of activities in which they engaged. There is no doubt, as one reads these well-illustrated statements, that children can gain a knowledge and understanding of the peoples of Latin America that will make them ardent promoters of the good-neighbor policy to which we subscribe as a nation.

In addition to the descriptions given of the study itself, some space is devoted to an explanation of how units are introduced and developed and how children learn to assemble and discuss materials, how trips are planned and

evaluated, and how discussions are carried on. One chapter describes the contributions of special language, art, and music teachers.

The appendix contains valuable practical information including a bibliography, lists of books for children (both informational and for pleasure), books for teachers, pamphlets, magazines, songs and films, together with definite information as to how the materials can be obtained. Any teacher will find the book an excellent resource whether she is ready to embark on "an experiment in international understanding" or is simply looking for a way to vitalize the geography of South America. It would be excellent material, as well, for an adult study group.

CECILE SWALES

RUE, ELOISE, compiler. *Subject Index to Books for Primary Grades.* Chicago: American Library Association, 1943. xxxv+236 pp.

Here is a publication designed to save hours of time for teachers and librarians. While it is a revision of the author's earlier book, *Subject Index to Readers,* it does not replace it. Many additional books have been included in the present volume; so many that older editions and less popular books included in the first index have, of necessity, been omitted here.

The books selected for inclusion seem an excellent list, including 300 readers (pre-primers, primers, and readers for Grades I to III), 130 unit readers in pamphlet form, and over 250 books of non-reader type. The latter include picture books, story collections, music books, and a few grammars and arithmetics. Full bibliographical information is given for each.

The index proper is splendidly done. Subject headings are well chosen and numerous cross-references add to ease of usage. Grade level or difficulty is given for each entry by means of simple symbols. These include designation of stories suitable for reading to younger children as well as suitability for children's reading.

It is to be hoped that supplements to this valuable library tool may be published at reasonable intervals. This basic volume plus such supplements should be in every library and be available to teachers of all primary grades.

RUTH E. SEEGER

SHANNON, IRWIN V. *Southeastern Ohio in Depression and War.* Columbus, Ohio: Ohio State University, 1943. x+50 pp. (Bureau of Educational Research Monographs, Number 28)

Any individual or organization in Ohio which has worked with the materials available in Southeastern Ohio, in the fields of education, health, or welfare, soon realizes that here is an area comprising almost one-quarter of the state which requires treatment of a character quite distinct from that employed in the other sections.

Mr. Shannon, in a carefully worked out plan, gives quite clearly the reasons for this situation. His subtitle is significant: he uses the phrase "the disintegration of an area" to implement his main title. In his first chapter he describes the socioeconomic characteristics of the area. Basic consideration in his discussion is the land. A large part of the area is in a condition of serious erosion; the remainder consists of submarginal land; there are three main areas comprising the coal fields and only two relatively small areas which are considered as excellent farm land. From these conditions flow a long chain

of effects in education, health, and welfare due to low productivity, declining population, and low per capita taxable wealth and incomes.

In the second chapter, Mr. Shannon examines the socioeconomic effect of mechanization in the coal-mining industry. His conclusions on a case-work basis coincide almost exactly with those drawn from a broader basis of facts by Mary E. Fledderus and Mary Van Kleeck, in *Technology and Livelihood*, published by the Russell Sage Foundation, that declining industrial opportunities mean a declining standard of living.

Mr. Shannon then proceeds to examine in his next chapter the inadequacies of the social-security and relief programs in Southeastern Ohio. Here his plea is for a recognition upon the part of the state that this regional area has similar socioeconomic characteristics; that the traditional treatment of problems on a county basis does not begin to meet the needs, let alone contribute to their solution; and that the state must look forward in its planning, and provide a new and different method of approach to the problems of this area. Just as in the field of education the state has taken a tentative step toward equalizing educational opportunities, so similar steps must be employed in agriculture, health, and welfare in order to raise the level of the standard of living in this area to the average of that throughout the state.

The future progress of the great state of Ohio is conditioned upon the solution of this problem in Southeastern Ohio. Mr. Shannon makes a distinct contribution to our understanding of this factor in modern statecraft.

ROBERT G. PATERSON
Ohio Public Health Association

ROWE, CLYDE E. *The Writing of Infrequently Used Words in Shorthand.* New York: Teachers College, Columbia University, 1943. viii+90 pp. (Teachers College, Columbia University, Contributions to Education No. 869)

The main contribution of this monograph is technological—the development of several procedures for investigating shorthand problems. The experimental interest is directed toward the infrequent words and the possibilities that they are written differently or more slowly and hence that different teaching methods should be used for them. One technique was a questionnaire following a shorthand test—the subjects were asked, for example, where they thought they paused and why. The results from these subjective data were not very conclusive—a finding which is not at all uncommon in psychology. The next problem dealt with transfer from frequent to infrequent words. When the symbol for a short frequent word was written erroneously as part of a longer infrequent word, then transfer was indicated. Apparatus was devised to record the temporal aspects of writing shorthand. It involved high-voltage, alternating current using only one phase of the cycle to arc from the lead of the pencil through the paper to a metal plate underneath. This made perforations sixty times a second when the pencil was moving; and if it was stationary, it made larger holes. To record the pauses also, a continuously moving tape was punctured by an auxiliary circuit such that when the pencil was operating, it shorted a fixed series resistance and made larger holes in the moving tape. By studying the two records, it was possible to determine exactly what had happened although this process was quite tedious. Moving

pictures were also used for the same purpose. Typical results were "significantly" longer pauses before the infrequent words and also longer times in writing them. Differences in the latter respect were greater, suggesting the greater importance of teachers attempting to increase speed. The data are treated adequately from the statistical standpoint. Doubtless the most worthwhile contribution of the study is the development of the recording technique which might be useful in studying many other aspects of writing or drawing.

HAROLD E. BURTT

TAFT, KENDALL B.; MCDERMOTT, JOHN F.; JENSEN, DANA O.; AND YEAGER, HAYES W. *English Communication: a Handbook of Writing and Speaking.* New York: Farrar and Rinehart, 1943. x+415 pp.

Handbooks of English are a familiar, and doubtless useful, adjunct to high-school and college courses in composition. If their treatment of the art of writing is somewhat prosaic and uninspiring, they nevertheless provide a convenient summary of the principles of grammar, sentence structure, punctuation, paragraphing, and spelling which are drawn upon whenever pencil is put to paper.

This pocket-size manual contains the customary glossary of faulty expressions ("*can* denotes ability; *may* denotes permission"); a fairly complete treatment of the subject-matter of formal grammar ("An adjective is a word that modifies or describes a noun or pronoun"); and sections dealing with diction, logic, mechanics, organization, and the writing of special types of papers, such as the précis and the technical report. It provides a considerable number of exercises, some of which are practicable and worth while for the student who has difficulty in expressing himself and some of which deal with wraithlike linguistic abstractions which are likely to be of concern only to the scholar.

Perhaps the most distinctive features of this handbook are a summary of the regulations governing Army and Navy correspondence and a detailed treatment of the factors involved in both formal and informal speaking. The former is a topic of timely interest and the latter deals with a type of communication which has often been slighted or ignored in previous manuals.

WILFRED EBERHART

* * *

Child Labor and Educative Work

[*Continued from page 52*]

programs of school and part-time work "where this is desirable." But the qualification may be taken by many to imply that in most cases such programs are not desirable.

It is to be hoped that the organizations represented by this Manifesto will co-operate not only in preventing harmful child labor but in the reorganization of educational programs so that the right kind of work will be an integral part of the education of every young person. R. H. E.